

# **EXTERIOR CLADDING & GLAZING**

The term '**cladding**' refers to components that are attached to the primary structure of a building to form non-structural, external surfaces. High quality, well designed, properly installed cladding can help in creating a controlled internal environment, protect the building from external conditions, provide privacy and security, prevent transmission of sound, provide thermal insulation, create external facade, prevent spread of fire, provide opening for access, daylight and ventilation and so on.

New technology and better integration with day lighting and climate control system allows advanced **glazing** in building facades to improve the comfort and performance of building occupants and also assist in national and global efforts to reduce greenhouse gas emissions that contribute to global warming.

# CLASSIFICATIONS (EXTERIOR CLADDING)

## Types of cladding-

### • ACP -

ACP stands for Aluminium Composite Panels, ACP Sheets are flat type panels, formed of thin aluminium sheets bonded to a non aluminium core. These exterior aluminium composite panels serves as an important part of building while construction. The application of this product is broadly noticed in shopping malls, cinema halls, hotels, hospitals and metro stations. These sheets are available in various colours, patterns and shapes. ACP manufactures have these sheets in metallic, solid smooth, brush, mirror and stone textures.



#### Fundermax/HPL -

Fundermax and High Pressure Laminate (HPL) are more elegant and durable product than ACP and wood. They are highly weather resistant and overcomes the shortcoming of woods. With the imaginative and innovative approach of our well trained designers, we find infinite applications for HPL sheets for interiors and exteriors of your structures for cladding or covering or shielding of the walls, facades, gates, doors, partitions, ceilings, balcony, railing and fences. These sheets are most suitable for bungalows, multi-storey buildings, hotels, restaurants, hospitals, offices, factories, schools, colleges, business centres and any other imaginable place.



### • Alstrong Wall Panel-

Wall Panels are ideal for applications in exterior and interior walls. They are extremely durable and provide a strong base that can withstand extreme weather conditions. Alstrong Zinnia<sup>™</sup> Technology is ideal for providing all kinds of panel surfaces with long lasting durability, innovative designs and other host of features. Panels are passed through multiple rounds of processing using Zinnia<sup>™</sup> Technology to achieve the highest levels of performance.



#### Alstone Evoque -

For a very long time, traditionally, wood has been used in various ways to suffice for our dwelling needs. However in spite of its advantage, wood have some serious shortcomings. One, it was not in abundant supply. Two, it had a life limited to a couple of years. It is here that ALSTONE brought forward EVOQUE, which is an Aluminium High Pressure Laminate (AHPL). It is more durable and elegant as compared to wood. It is also water proof, fungus and termite resistant and UV treated. Unlike other HPLs and of course wood, these 8mm thick EVOQUE panels are so robust that it is highly effective under extreme weathering conditions.





### • CENTURYPLY ZYKRON PLANK -

Zykron contains Fibre Cement composite material that is made by combining cement and cellulose fibres. This composite gives Zykron a unique finish, which makes it the ideal choice for a wide range of applications. With its high strength and unparalleled durability, Zykron is the perfect choice for all your indoor and outdoor construction needs.









# **CLASSIFICATIONS (GLAZING)**

Types of Glazing

### • Curtainwall Glazing-

A curtain wall system is a specialized type of cladding typically used in the construction of commercial and institutional buildings. It utilizes glass, either transparent or spandrel or both, and vertical and horizontal mullions acting as structural members to transfer wind and gravity forces to the building structure. The spandrel portion can be metal panel or some other material. There are two types of curtain wall systems – the stick system and the unitized system.

Stick System: is a curtain wall system in which the mullions are installed first, and then the glass panels are inserted into the mullion framing in the field. The vertical deflection criteria are more stringent for this type of system than a unitized system. The primary advantage of this system is its lower cost when compared to the unitized system.

Unitized System: A unitized system is a curtain wall system in which the mullions are fabricated with the glass panels in place, and then erected as individual panels. The advantages of the unitized system are firstly that the erection time is reduced, and secondly Unitized panels can tolerate more vertical deflection in the structure due to their gasket joints.









### • Structural Glazing -

Structural Glazing forms a very important part of façade design. Over the years structural glazing has evolved and it has been a very challenging to find good structural glazing solutions. The different types of structural glazing systems are-

### 1. Four Sided Framed Glazing:

In four sided framed glazing a frame is fabricated on all four sides of the glass to support it. During installation the horizontal and vertical support members are framed on the building. Glass is used as a transparent infill panel.

### 2. Two Sided Framed Glazing:

In a two sided framed glazing the support for glass is only on two sides. It is either fabricated in the horizontal or in the vertical direction. The glass is then fixed in the mullions.

### 3. Frameless Glazing:

The frameless glazing imparts a seamless look to the glass. The glass is fit together with different kinds of hardware like spider glass etc., which are used to tie the glass to the structure. Spider glazing is the only option available for the larger opening elevation in the exterior and entrance of commercial and residential buildings.

### 4. Glass Fin Glazing:

Glass fins are vertical glass sheets used to strengthen the glass facade. The glass sheet is placed in a perpendicular direction to the building facade. It is bonded to the building with special hardware and silicon sealants.

The Sealants that are used in structural glazing have to be strong, durable and be resistant to ultra violet radiation. They should also be neutral to changing weather conditions since glass may get over-heated in summer and there might be heat loss in winters.









These items described above are just a brief classifications of exterior cladding and glass glazing and there are a number of other innovative and customisable options available with us. Contact our Technical Team for more information about the same and we would be more than happy to serve you to best of our knowledge and experience. We also design and work for CNC/LASER cutting and signage along with these cladding and glazing systems.